PAPP, E.

(4)

5117. DETERMINING OXIDIZABILITY OF COALS AND CARBONS, ESPECIALLY ANODE CARBONS. Papp, E., Rommeltor, A. and Antonescu, A. (Acta Tech. Acad. Sci. Hung., 1952, vol. 4, 85-106; title in Chem. Abstr., 1953, vol. 47, 4579).

10/27/54 APP

PAPP, E

Sedimentation of red muds in the Bayer process. E. Papp, I. Magyarosy, and A. Héjja (Met. Research Inst., Budapest). *Acta Tech. Acad. Sci. Hung.* 13, 33–52(1955) (in English).—Red mud (I) contains Al_2O_3, SiO_2, Fe_2O_3, TiO_2, Na_2O, and H_2O as main ingredients, and traces of Na_2CO_3, Na_2SiO_3, Na_3PO_4, Na_2SO_4, Na_2CrO_4, $NaVO_3$, Na_2MnO_4, NaCl, NaF, Na_3AsO_4, Na_2GaO_3, Na_2ZnO_2, $Na_2Fe_2O_4$, Na_2TiO_3; thus the charges on the surface, which prevent a quick sedimentation, cannot be stated accurately with respect to sign and magnitude. I was studied in a glass sedimentation app., which could be maintained at 95–102°; the same equipment was used to study natrolite (II), which is known to occur in I, and has a well-defined compn. $2SiO_2.Al_2O_3.Na_2O.2H_2O$. The I was prepd. from a grade 10–12 bauxite of a hydrargillite-boehmite structure, by digesting for 1–3 hrs. at 15 atm. The effects of starch (III) and of a partial reduction in speeding up the sedimentation were tested. Addn. of 0.1–0.3% of bentonite, wehrlite, MgO, pyrite, calcined dolomite, and ferrosilicon did not warrant any tech. applications. Therefore, in order to get a better idea of the elec. surface charges, electrophoretic studies were undertaken on I, I + III, II, I with various degrees of reduction, and powd. coke particles. It was thus found that in distd. H_2O, weak NaOH, strong NaOH, or aluminate lye both I and II will be charged positively; this fact together with the findings that very often gas bubbles are observed at the surface of I leads to the hypothesis, that the surface of I acts like an elec. condenser, where charges neutralize each other according to $2\,OH = H_2O + O + 2e$. Any reducing agent which will prevent the formation of O will accelerate the sedimentation. This was proven by the addn. of N_2H_4, CH_2O, MeOH, $FeSO_4$, and Na_2SO_3.

Werner Jarolimek

(2)

PAPP, E.

New trends in bauxite exploitation according to Bayer's system on the basis of September 1955 foreign publications. p.82. (Kohaszati Lapok. Budapest. Vol. 11, no. 2, Feb. 1956.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

PPPP, K,

3

65. On the sedimentation of red muds in the Bayer process. (In English) E. Papp, I. Magyarossy, A. Héjja. *Acta Technica Academiae Scientiarum Hungaricae*. Vol. 13, 1955, No. 1—2, pp. 33—52, 18 figs.

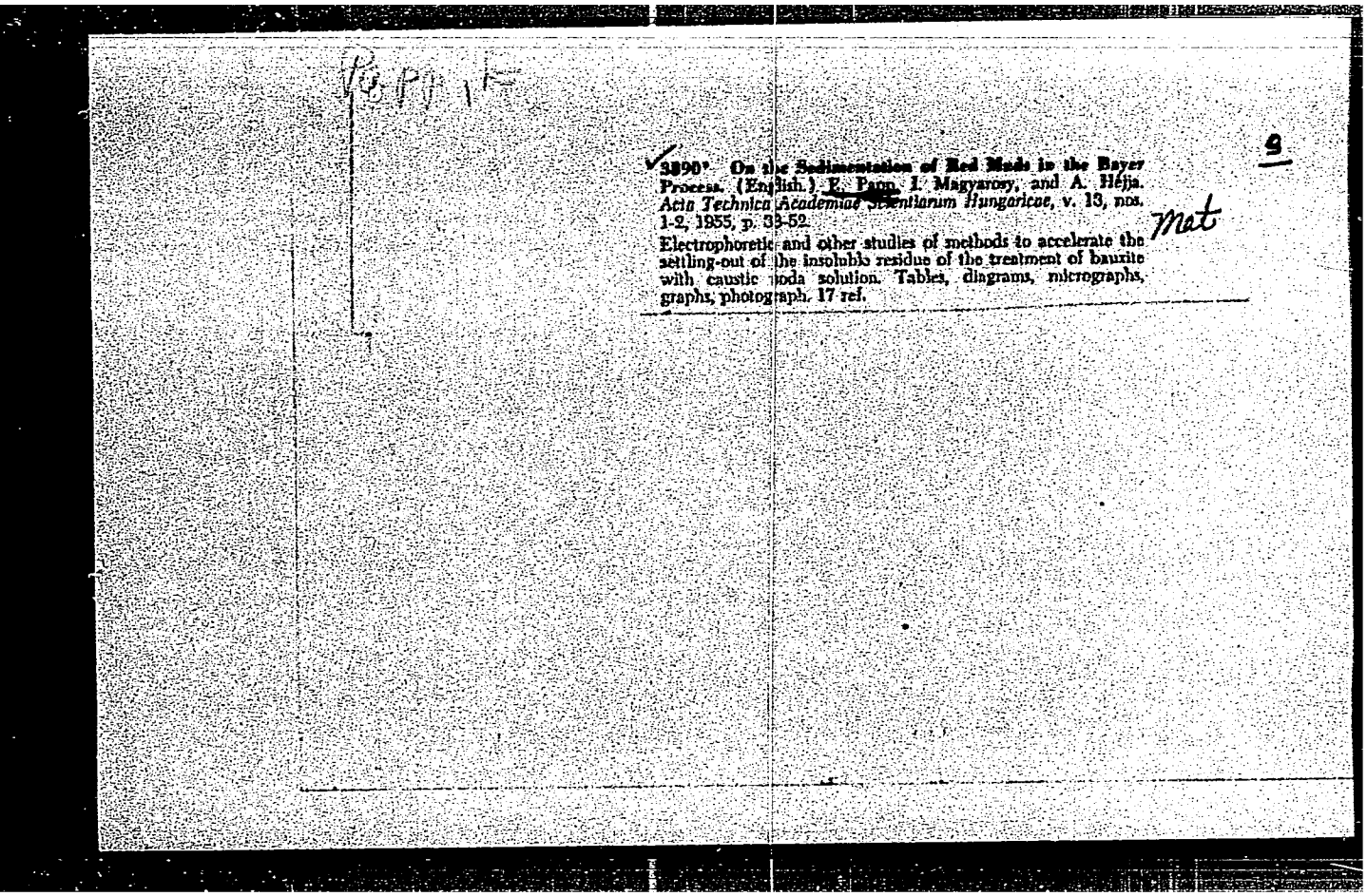
The speed of sedimentation of red muds in the production of alumina by the Bayer process has been investigated under laboratory conditions in a glass thermostat with internal electric heating. Different additives have been used with a view to accelerating sedimentation. The effect of the during pretreatment of bauxite and of the addition of reducing agents to the red mud on the rate of sedimentation is discussed in detail. A new theory based on electrophoretic studies and gas analyses is being elaborated for the sedimentation of Bayer red muds.

3

Metal

78. Gallium content of Hungarian bauxite. B. Papp, J. Üveges, A. Hejja. *Kohászati Lapok*, Vol. 10 (88), 1955, No. 7, pp. 314—319, 3 figs., 2 tabs.

A wet analytical and spectroscopic method has been elaborated for the precise determination of gallium contents in the order of a thousandth per cent. By this method a survey has been prepared of the gallium contents found in the raw materials, intermediate and final products of Hungarian alumina plants operating by the Bayer process. On the basis of these data metallic gallium has been produced from the intermediate products by electrolytic advance concentration and by the further separation of the enriched precipitate.



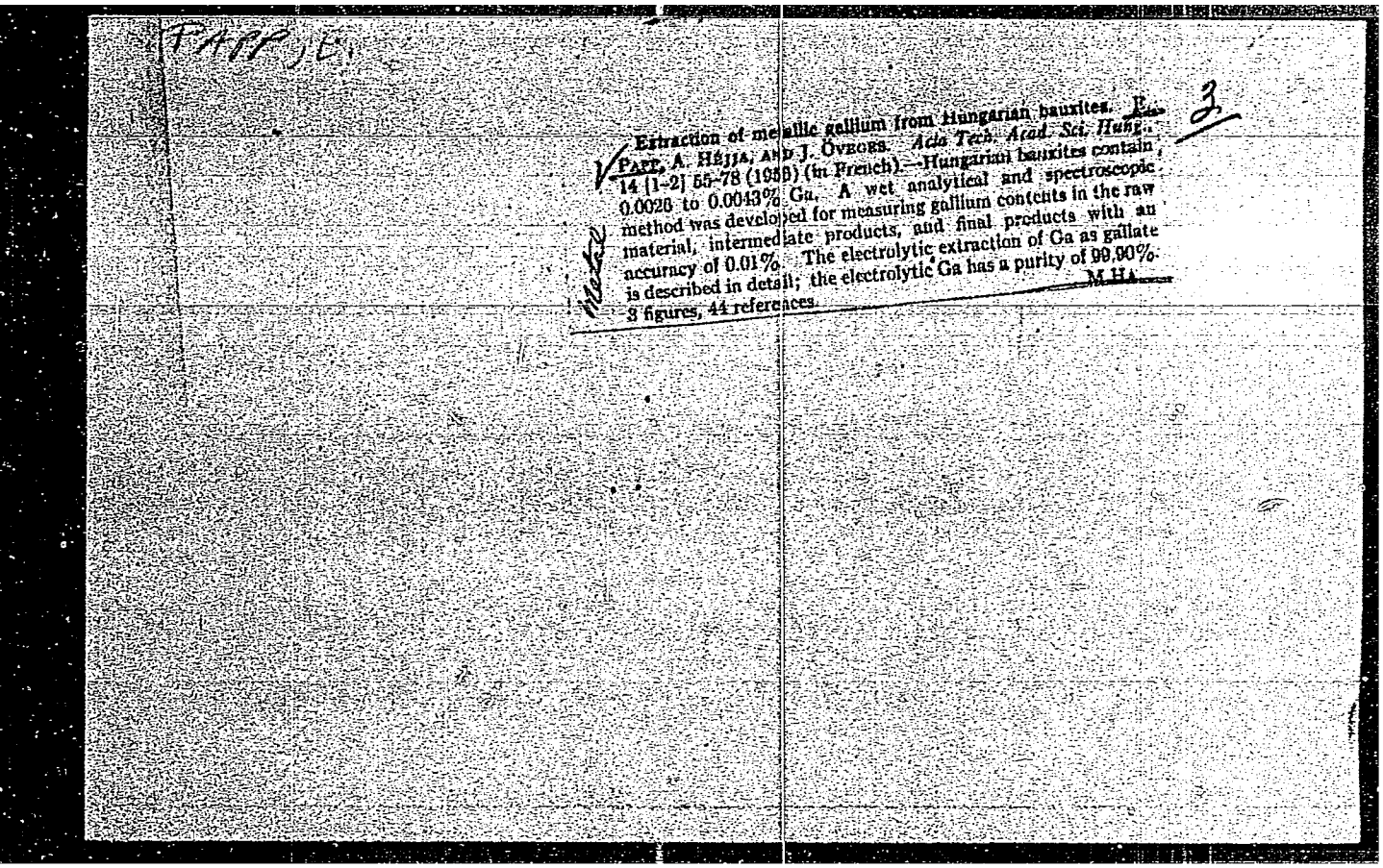
3890* On the Sedimentation of Red Muds in the Bayer Process. (English.) E. Papp, I. Magyarosy, and A. Héjja. *Acta Technica Academiae Scientiarum Hungaricae*, v. 13, nos. 1-2, 1955, p. 33-52.

Electrophoretic and other studies of methods to accelerate the settling-out of the insoluble residue of the treatment of bauxite with caustic soda solution. Tables, diagrams, micrographs, graphs, photograph. 17 ref.

PAPP, E.; MAGYAROSSY, L; HEJJA, A.

On the sedimentation of red muds in the Bayer Process. In English. p. 33. Vol 13, No 1/2, 1955. ACTA MICROBIOLOGICA and ACTA TECHNICA. Budapest, Hungary.

So: Eastern European Accession. Vol 5, No 4, April 1956



Extraction of metallic gallium from Hungarian bauxites. E. Pap, A. Hájja, and J. Övegs. *Acta Tech. Acad. Sci. Hung.* 14 [1-2] 55-78 (1956) (in French).—Hungarian bauxites contain 0.0026 to 0.0043% Ga. A wet analytical and spectroscopic method was developed for measuring gallium contents in the raw material, intermediate products, and final products with an accuracy of 0.01%. The electrolytic extraction of Ga as gallate is described in detail; the electrolytic Ga has a purity of 99.90%. 9 figures, 44 references. M. Ha.

PAPP, E.

New data on the problem of precipitation of red mud in the Bayer process. p. 40. KOHASZATI LAPOK. (Magyar Banyaszati es Kohaszati Egyesulet) Budapest. Vo . 10, no. 1, Jan. 1955.

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 5, no. 6, June 1956

PAPP, E.

Conclusions drawn from the power balance of aluminim furnaces. p. 18
KOHASZATI LOPAK. (Magyar Banaszati es Kohaszati Egyesulet) Budapest.
Vol. 11, No. 1, Jan. 1956

SOURCE: East European Accessions List (EEAL) Library of Congress
Vol. 5, No. 6, June 1956

PAPP, ELEMER

Hungary/Chemical Technology - Chemical Products and Their Application. Electrochemical Manufacturing. Electrodeposition. Chemical Sources of Electrical Current, I-8

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62212

Author: Papp, Elemer

Institution: None

Title: Deductions from Data of Energy Balance of Industrial Aluminum Cell

Original Periodical: Aluminiumkohok energia merlegebol levonhato kovetkeztetesek, Kohasz. lapok, 1956, 11, No 1, 18-25; Hungarian; Russian and English resumés

Abstract: Description of energy balance of a 52,000 a industrial aluminum cell. A critical analysis is made of the measurement methods and data thus obtained. Detailed discussion is presented of: (1) correlation between observed decomposition voltage and D; (2) areas of the cell where considerable losses of voltage take place (for example films formed at bars of electrode).

Card 1/1

PAPP, E.

Extraction of metallic gallium from Hungarian bauxite. E. Papp, A. Hejja, and J. Oveges (Inst. recherches mét., Budapest). *Acta Tech. Acad. Sci. Hung.* 14, 55-78(1956) (in French).—Macro- and spectroscopic methods for the detn. of Ga are outlined. A method for the production of electrolytic Ga is given. Otto H. Johnsen

3

PAPP, E.

Some recent data on cryolite baths at aluminum foundries. p. 352
MAGYAR KEMIKUSOK LAPJA. (Magyar Kemikusok Egyesulete) Budapest.
Vol. 10, No.11, Nov. 1956

SOURCE: East European Accessions List (EEAL) Library of Congress
Vol. 5, No. 6, June 1956

PAPP, E. NAGY, L. CSIKMADIA, I.

Some remarks on the article "The Debated Problems of Good Shipments on Highways." p. 390.

(Elelmezesi Ipar. Vol. 13, no. 21, May 1957. Budapest Hungary)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

PAPP, E.

TECHNOLOGY

KOZLEKEDESI KOZLONY (Hungary, Kozponti Szallitasi Tanacs. Budapest.)

PAPP, E.: Evaluation of the responsibility of the shipping agent in the practice of arbitration committees. p. 882.

Vol. 14, no. 52, Dec. 1958.

Monthly List of East European Accession (EEAI) LC Vol. 8, No. 3
MAech 1959, Unclass.

COUNTRY : Hungary
CATEGORY :
ABS. JOUR. : RZKhim., No. , 1960, No.

AUTHOR : Papp, E.
INST. : Not given
TITLE : Investigation on the Possibility of Producing Zirconium from Bauxite

SOURCE, PUB. : Fenigari Kutato Int Kozl, 2, 64-71, 294, 295, 370 (1959)

ABSTRACT : Spectroscopic analyses have shown that Hungarian bauxite contains an average of 0.029-0.039% zirconium; the zirconium content in Bayer process red mud attains 0.05% and can be brought to 0.2% wet concentration. However, even at the latter concentration the production of zirconium from that source is unprofitable. The bibliography lists 50 titles.

D. Pyushpesi

CARD 1/1

S/081/62/000/001/022/067
B151/B101

AUTHORS: Papp, E., Kotsis, T.

TITLE: Analytical control of pure gallium

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1962, 153, abstract 1D127 (Acta chim. Acad. scient. hung. v. 28, nos. 1-3, 1961, 29-32)

TEXT: The use of various methods for determining the impurities in high-purity gallium (99.99 - 99.9999%) is examined. For determining the impurities by the spectral method 20 - 25 mg of the metallic sample are vaporized off from the channel of a carbon electrode in a d. c. arc with a current of 10 a. Alternatively 2 g of the sample are dissolved in 25 ml of double distilled HCl, with the addition of 1 drop of HNO_3 and the solution introduced into the electrode spacing through an axial opening in the lower electrode, under the action of a stream of pure, filtered N_2. In the second case the spectra are excited with a high frequency spark

Card 1/2

FRANCHE[illegible]; VITA, Ala; HESLEAGA, E.; APOSTOL, A.; BALTIEV, Ariadna; BATCU, A. BLINDU, P.; BLUM, Miria [deceased]; BRAUNER, E.; CUCIUREANU, Georgeta; DUMITRIU, St.; FELLER, H.; MICO, I.; MIHUL, Valentina; OVANESCO, A.; PAPP, E.; RADULESCO, Al.

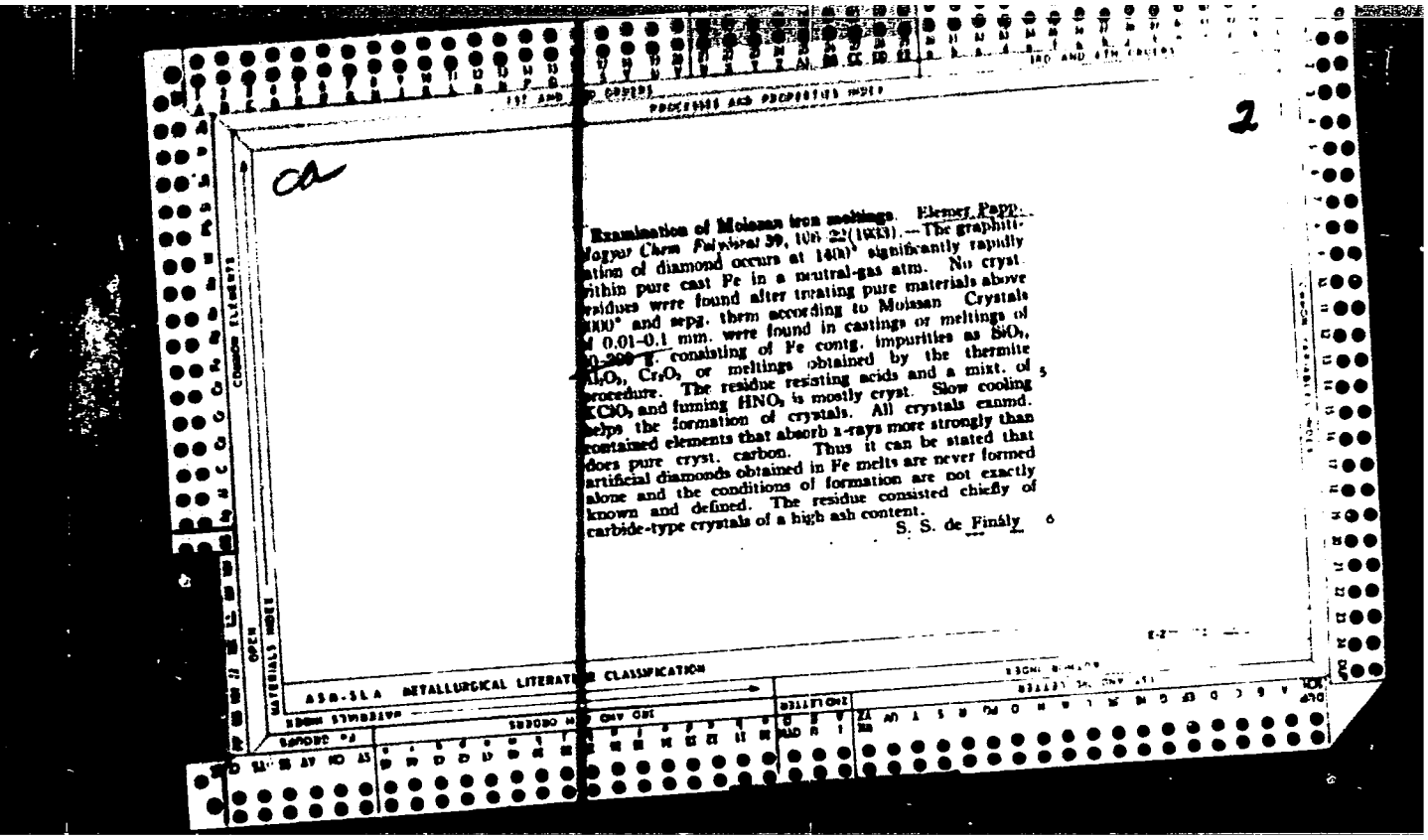
Contributions concerning allergic complications of scarlatina within the scope of data obteined by current research. Arch. roum. path. exp. microbiol. 22 no.4:909-918 S-D'63

1. Travail de l'Institut Medico-Pharmaceutique, Jassy, et de l'Hopital des Maladies Contagieuses de Jassy.

GLIGORE, V., prof.; LICACIU, O., dr.; HANN, K., dr.; SOPON, E., chim.; SCHEAU, Maria, biol.; PAPP, E., chim.

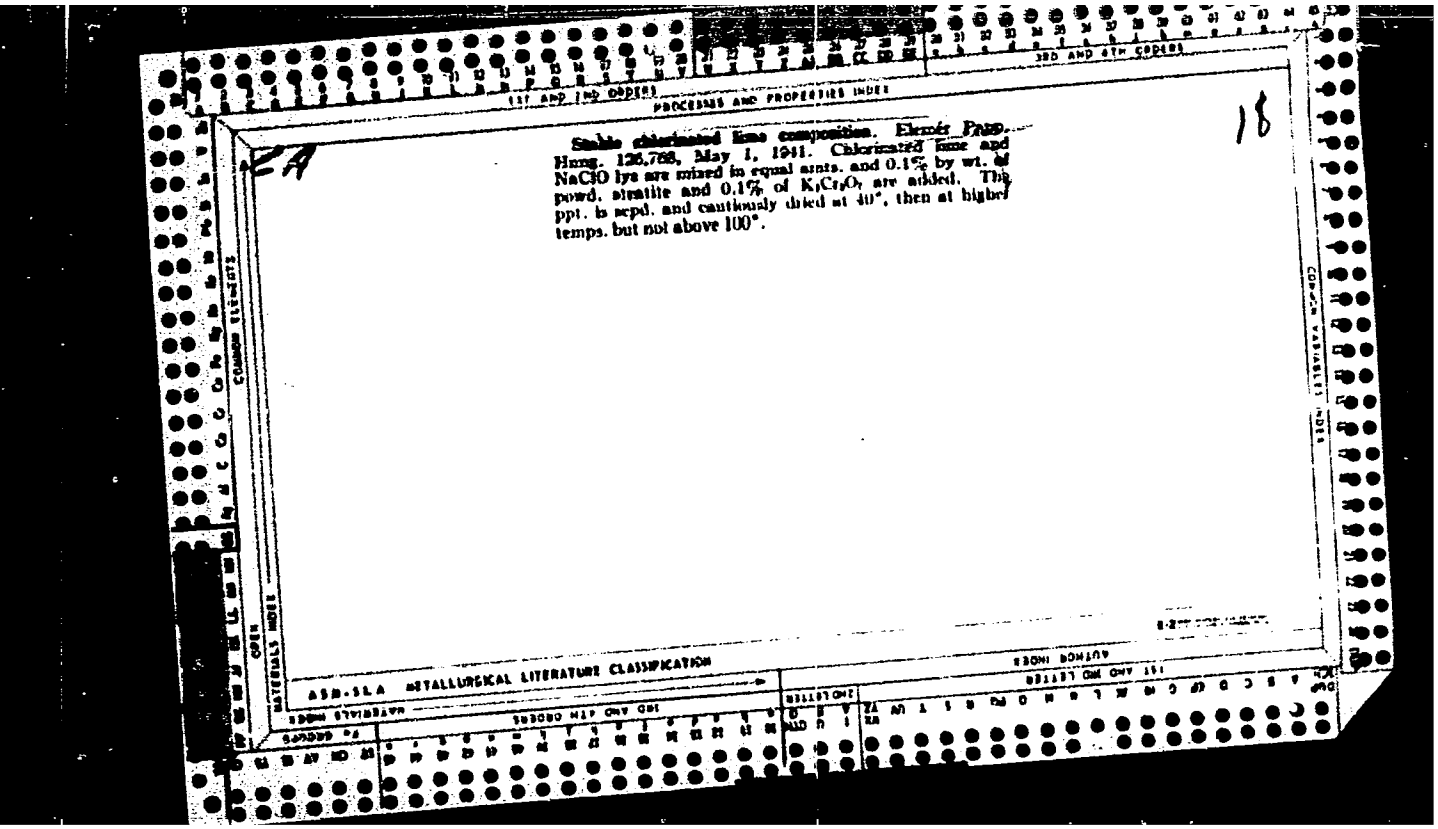
Research on the disorders of carbohydrate metabolism in chronic diffuse hepatopathy. Med. intern. (Bucur.) 17 no.9:1077-1084 S '65.

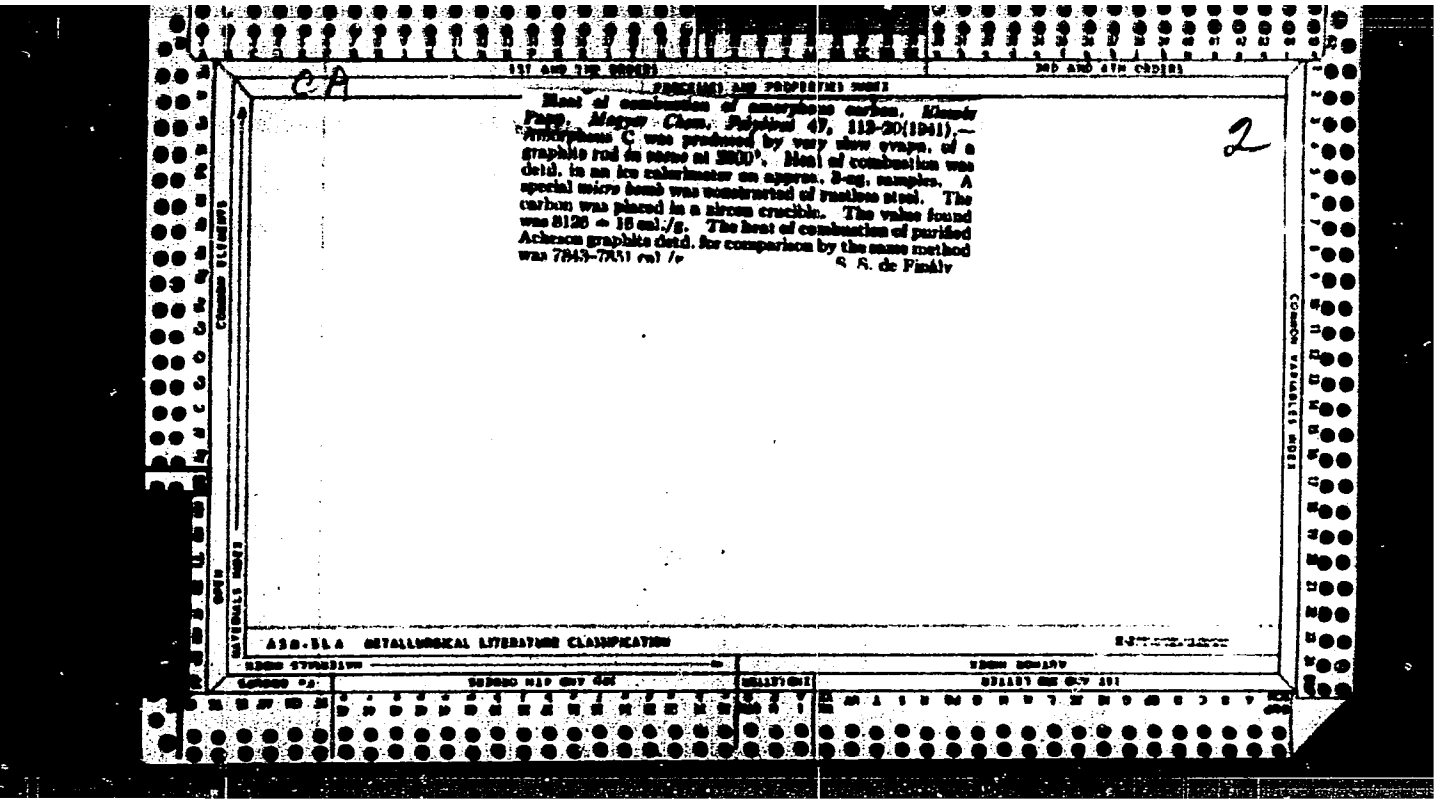
1. Lucrare efectuata in Clinica a II-a medicala Institutul medico-farmaceutic, Cluj (director: prof. V. Gligore).



Examination of Moissan iron meltings. Elemer Papp. *Magyar Chem Folyóirat* 39, 108 22(1933).—The graphitization of diamond occurs at 1400° significantly rapidly within pure cast Fe in a neutral-gas atm. No cryst. residues were found after treating pure materials above 1000° and segg. therm according to Moissan. Crystals of 0.01–0.1 mm. were found in castings or meltings of 0.200 g. consisting of Fe contg. impurities as SiO_2, Al_2O_3, Cr_2O_3 or meltings obtained by the thermite procedure. The residue resisting acids and a mixt. of $KClO_3$ and fuming HNO_3 is mostly cryst. Slow cooling helps the formation of crystals. All crystals examd. contained elements that absorb x-rays more strongly than does pure cryst. carbon. Thus it can be stated that artificial diamonds obtained in Fe melts are never formed alone and the conditions of formation are not exactly known and defined. The residue consisted chiefly of carbide-type crystals of a high ash content.

S. S. de Finály





CA

2

Heat of combustion of amorphous carbon. Klaudy Pappo, Magyar Chem. Folyóirat 47, 113-20(1941).—Amorphous C was produced by very slow evapn. of a graphite rod in vacuo at 3800°. Heat of combustion was detd. in an ice calorimeter on approx. 3-mg. samples. A special micro bomb was constructed of rustless steel. The carbon was placed in a nitrom crucible. The value found was 8126 ± 16 cal./g. The heat of combustion of purified Acheson graphite detd. for comparison by the same method was 7943–7951 cal./g.

S. de Finály

A20-51A METALLURGICAL LITERATURE CLASSIFICATION

CA

PROCESSES AND PROPERTIES INDEX

2

Changes of chemical equilibria of solutions of K_2CO_3 and $KHCO_3$. Elemér Papp and Judit Poplány. *Magyar Chem. Folyóirat* 20, 19-21(1944).—Practical experiences obtained in a plant where solns. were used to absorb gaseous CO_2 showed that the absorption capacity of such solns. strikingly diminished after certain periods of use. Detailed investigations proved that the slowly increasing content of K_2SO_4 brought about decompn. of $KHCO_3$. Various other compds. seemed also to have considerable influence on the equil.: $2KHCO_3 \rightleftharpoons K_2CO_3 + CO_2 + H_2O$. All of the compds. investigated seemed to displace the equil. to the left; i.e. they preserved the $KHCO_3$. On addn. of certain quantities of salts the state of equil. reaches a max. and no further quantities had any extra effects. The yield of CO_2 obtained from such solns. by boiling was lower by 20-30%. István Finály

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

7

Rapid titration of hypochlorites with potassium iodide. Elemér Papp and Judit Pogány. *Magyar Chem. Folyóirat* 51/53, 13-15(1945-47)(Pub. 1948).—The method of Penot was compared to that of Ponthus, and a modification of the latter was worked out. The soln. analyzed should contain 30-100 g. of active Cl per l. To 5 cc. of sample in a porcelain dish add 20-30 cc. of a satd. soln. of H_3BO_3 or $NaHCO_3$ and then titrate the liquid with 0.25 N KI soln. Starch soln. is unnecessary since the first drop of excess KI gives a permanent brown color which does not disappear when vigorously stirred. If a black color appears add more $NaHCO_3$. István Finály

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

C.A.

Fluxes for melting aluminum-magnesium alloys. Elemér Papp and Zoltán Buray. *Aluminium* (Budapest) 1: 27–8(1949).—Cryst. $MgCl_2$ was made from partially oxidized and carbonized powd. Mg mixed with 12.5% NH_4Cl and glowed at 350–400°. The most suitable flux consisted of 40 g. anhyd. $MgCl_2$, 20 g. KCl, 20 g. NaCl, and 10 g. cryolite. One and a half % of such covering salt was satisfactory in expts. conducted with an Al alloy contg. 9% Mg in an elec. crucible furnace of 12 kw. István Finály

C.A.

7

The quantitative determination of vanadium Elemer Papp (*Hungaria*, Budapest) 1, 101-4(1940). Three facts must be kept in mind: (1) the salts of V ppt. very slowly, 4 to 24-hr. periods are required for full pptn.; (2) V traces can only be washed from the ppts. by strongly alk. liquids, and (3) the various elements have a vigorous effect on the reducing and oxidizing activity of V. A rapid method is proposed for detg. V, Ti, and Fe in the presence of each other. First Fe is detd. in a sep. sample by the Zimmermann-Reinhardt method. Then 50 cc. of a standard soln. is treated with 2 cc. of 18 N H_2SO_4, 2 cc. concd. H_3PO_4 (3-4 cc. in the presence of much Fe), 1 cc. 30% HF (to remove the color owing to Ti), and 1 cc. 3% H_2O_2, detd. to 100 cc., shaken, and V detd. colorimetrically. Then a comparison soln. is prepd., which contains as much V as the other soln., and is treated similarly. The difference in the colorimetric results gives the Ti content. The potentiometric method described by Hiltner (C. A. 29, 3942) is also available.
István Finály

CA

15

Sodium oxide content of red muds of alumina plants and description of an electrolytic device for the determination of sodium oxide content. Blenke-Papp (Aluminium Research Inst., Budapest). *Aluminium* (Budapest) 2, 51-7 (1950).—Error sources of gravimetric methods are summarized. A special app. was constructed for the electrolytic detn. of Na_2O in red mud samples. A very finely ground sample is dried at 110° and thoroughly mixed. Calcine 1 g. red mud and 0.6 g. pure sublimed S in a quartz crucible for 5 min., wash the residue into a 100-ml. beaker with hot water, boil, pour the liquid at 70-80° into the anode area of the electrolyzing app. with a diaphragm of cellophane 0.23 mm. thick, add water at 70-80° to the outer cathode area, introduce a d.c. of 110 v., 0.5-0.7 amp. for 20 min., pour off cathode liquid and replace with fresh hot water, and electrolyze further until current diminishes to 0.05 amp. or below. Titrate the combined cathode liquids with 0.1 *N* HCl or H_2SO_4 in the presence of methyl red. A Ca content of below 2% has no disturbing effect; in case of Ca above 2%, 5-10 ml. 0.1 *N* Na_2CO_3 is added to the anode liquid and this amt. is deducted in the calcns. Investigation of Hungarian red muds by this method proved that 3 kinds of Na_2O exist in red muds: (1) water-sol. portion (5-15%), (2) ion-exchangeable-portion (60-80%), and (3) strongly bound portion (5-25%). Caustification of red mud according to Pfeffer recovers only Na_2O belonging to types (1) and (2).

István Finály

C.A. 9

Chemical problems of the Hungarian alumina and aluminum industry. Elemér Papp (Aluminium Kutató Intézet, Budapest) *Magyar Kém. Lapja* 5, 341–2 (1950). Problems connected with analysis and testing with the utilization of by-products, and with increasing the manufg. economy are discussed. I. Finaly

PROCESSES AND PROPERTIES INDEX

Ca

9

Separation of vanadium from residues. *Elemér Papp. Aluminium (Budapest)* 1, 49-51, 73-4(1949).—The residue obtained in working up bauxite ores at Al_2O_3 plants in Ajka and Mosonmagyaroóvár contains, at a moisture content of 30.0-41.5%, 1.82-4.01% V_2O_5. Various methods were tested for sepg. V. After various methods were tried and discarded, the following procedure was worked out and found to be suitable. Two kg. of residue is treated with hot water and filtered so as to obtain 1750 ml. filtrate. The filtrate is then evapd. to half vol., cooled, and 7-10% cryst. V_2O_5 (= 150-200 g.) removed and added to the undissolved portion of the raw material. The sepd. 750 ml. liquid contg. about 6-7% of the original V content is put aside temporarily. Then the remaining solid residue (1500 g.) and the sepd. crystals are dissolved in 2500 g. hot water, conn. HCl or H_2SO_4 is added to pH 5.5, and the whole cooled and filtered. The filtrate is evapd. to half vol. and once more filtered. The 360 g. salt obtained is about 3% of the original V_2O_5 content. The filtrate is treated with 650 ml. NH_4OH to pH 8.0, let stand, then HCl added to pH 3.0, followed by storage for 24 hrs. The yellow or green ppt. (26 g.) contains 48% of the total V_2O_5 content. The filtrate contains 2.6% of the total V_2O_5, which is lost. The yield ranges from 80 to 85%. A pilot plant with a capacity of 1 metric ton is proposed.

István Finály

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

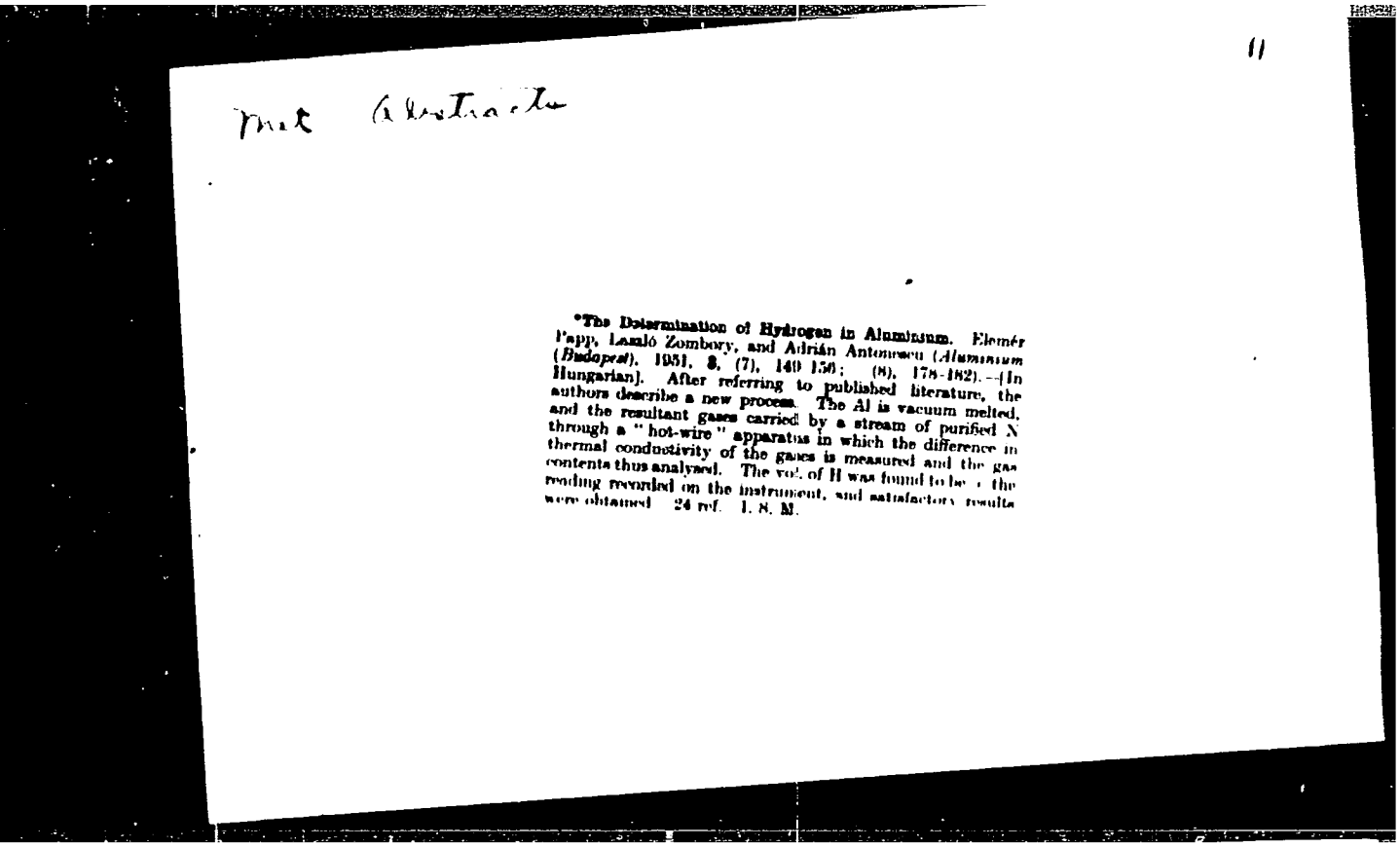
Study on the oxidizability of coals with special reference to anode carbons. I. Elemér Papp, Hadrian Antonescu, Mária Gy. Holló (Magyar Alumíniumkutató Intézet, Budapest, Hung.). *Aluminium* 3, 13-17(1951). Coke residues obtained by CaH_2 extn. of raw anode masses were screened, and material of grain size 1.5-0.06 mm. and below was used for tests. One g. of such coke was treated with 15 ml. 40% CrO_3 30 mins. on the water bath, then 300 ml. cool distd. water was added. The soln. was filtered, the filtrate diln. to 500 ml., and an aliquot portion titrated iodometrically. The oxidation diagrams obtained by this method showed that coke of finer grain size was more oxidizable than was coarse coke. The oxidation process seemed to take place quickly in the 1st phase, but after 5-10 min. the oxidation rate was very slow. The fraction below 0.06 mm. obtained directly by sieving the residue after extg. with CaH_2 consumed 1.5 times as much CrO_3 as did coke of similar fineness obtained by comminution of the fraction of 1.5-mm. grain size. This leads to the conclusion that the rate of oxidation depends to a high degree on the amt. of bonding material adhering to the surface of coke grains, which is not sol. in CaH_2. Comparative tests with raw and ignited petroleum coke proved that the latter consumed much less CrO_3. Ignition at higher temps. decreased the consumption even more. 48 references. II. Elemér Papp, Alfréd Romwalter, and Adrian Antonescu. *Ibid* 28-32. - A new method was elaborated, the principle of which is the measurement of the amt. of CO_2 as a function of time, as the basis of oxidizability. The coal or C sample is treated with H_2SO_4 contg. chromic acid in a special app. at 100°. The CO_2 formed is removed by a stream of N at a velocity of 6 l./hr. and absorbed by 2% $Ba(OH)_2$. The amt. of CO_2 can be detd. easily by measuring the elec. cond. of the $Ba(OH)_2$ soln. Investigation of various anodic masses by this app. proved that the oxidizability has an approx. linear relation to surface. The degree of oxidizability of the same coal or C varies according to the heat treatment. When subjected to heat treatment the oxidizability of petroleum coke heated to temps. up to 800° decreased and then again increased when the heating temp. was above 800°. Anthracite heated to 1380° was more readily oxidized than anthracite heated to 1000° but with more difficulty than the raw anthracite. When samples of different origin were compared, Acheson graphite was most readily oxidized and anthracite least readily. István Finály

PAPP, I. Elemer

CA

21

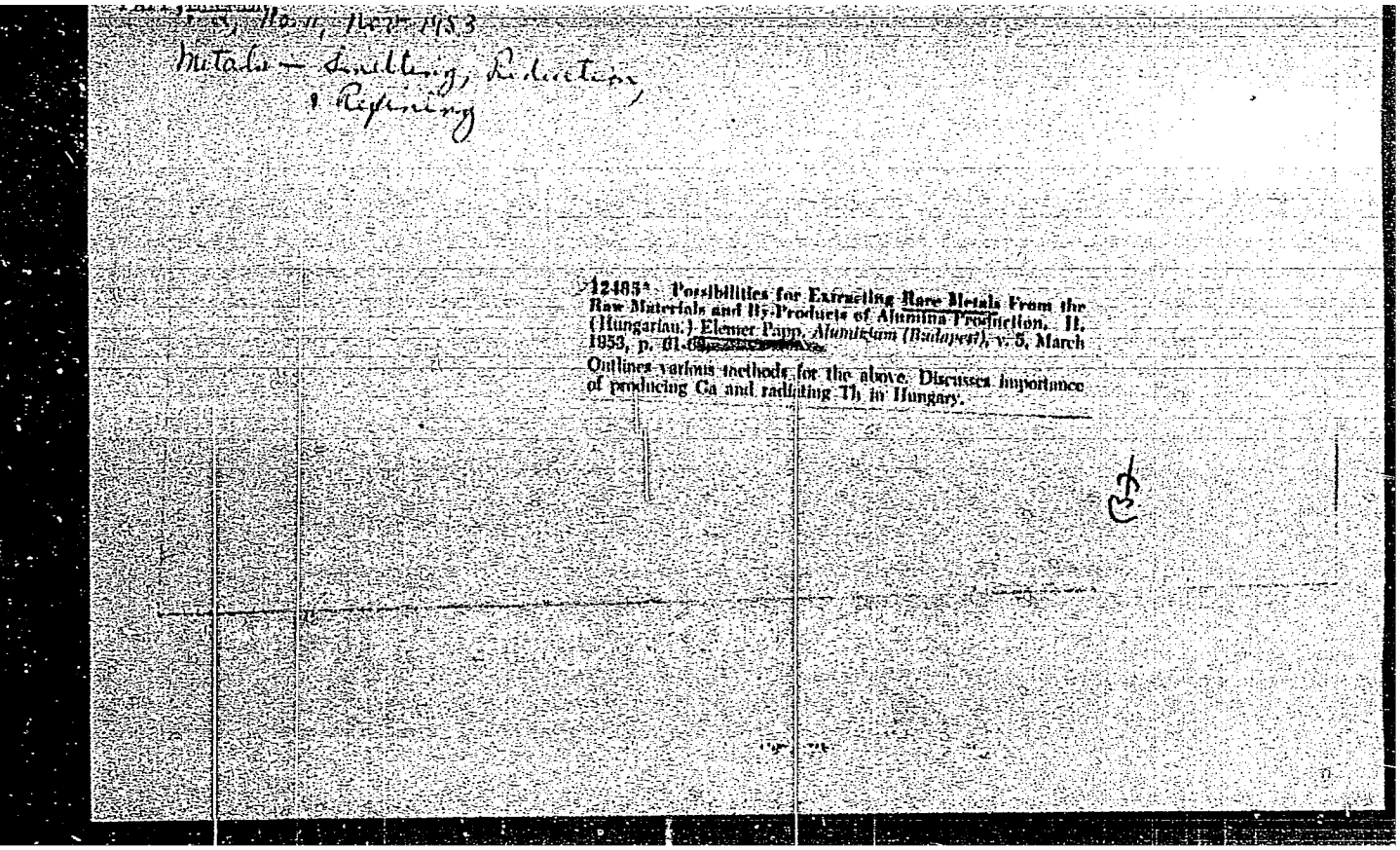
Study on the oxidizability of coals with special reference to anode carbons. II. Elemér Papp, Hadrian Antonescu, Maria Gy. Holló (Magyar Alumíniumkutató Intézet, Budapest, Hung.). *Aluminium* 3, 13–17(1957).—Coke residues obtained by C_4H_8 extn. of raw anode masses were screened, and material of grain size 1.5–0.06 mm. and below was used for tests. One g. of such coke was treated with 15 ml. 40% CrO_3 30 mins. on the water bath, then 300 ml. cool distd. water was added. The soln. was filtered, the filtrate dild. to 500 ml., and an aliquot portion titrated iodometrically. The oxidation diagrams obtained by this method showed that coke of finer grain size was more oxidizable than was coarse coke. The oxidation process seemed to take place quickly in the 1st phase, but after 5–10 min. the oxidation rate was very slow. The fraction below 0.06 mm. obtained directly by sieving the residue after extg. with C_4H_8 consumed 1.5 times as much CrO_3 as did coke of similar fineness obtained by comminution of the fraction of 1.5-mm. grain size. This leads to the conclusion that the rate of oxidation depends to a high degree on the amt. of bonding material adhering to the surface of coke grains, which is not sol. in C_4H_8. Comparative tests with raw and ignited petroleum coke proved that the latter consumed much less CrO_3. Ignition at higher temps. decreased the consumption even more. 48 references. II. Elemér Papp, Alfréd Romwalter, and Adrian Antonescu. *Ibid.* 28–32.—A new method was elaborated, the principle of which is the measurement of the amt. of CO_2 as a function of time, as the basis of oxidizability. The coal or C sample is treated with H_2SO_4 contg. chromic acid in a special app. at 100°. The CO_2 formed is removed by a stream of N at a velocity of 6 l./hr. and absorbed by 2% $Ba(OH)_2$. The amt. of CO_2 can be detd. easily by measuring the elec. cond. of the $Ba(OH)_2$ soln. Investigation of various anodic masses by this app. proved that the oxidizability has an approx. linear relation to surface. The degree of oxidizability of the same coal or C varies according to the heat treatment. When subjected to heat treatment the oxidizability of petroleum coke heated to temps. up to 800° decreased and then again increased when the heating temp. was above 800°. Anthracite heated to 1360° was more readily oxidized than anthracite heated to 1000° but with more difficulty than the raw anthracite. When samples of different origin were compared, Acheson graphite was most readily oxidized and anthracite least readily. István Pinály



11

Met Abstracts

The Determination of Hydrogen in Aluminium. Elemér Papp, Lajos Zombory, and Adrián Antonescu (*Aluminium* (*Budapest*), 1951, **3**, (7), 149-156; (8), 178-182).—[In Hungarian]. After referring to published literature, the authors describe a new process. The Al is vacuum melted, and the resultant gases carried by a stream of purified N through a "hot-wire" apparatus in which the difference in thermal conductivity of the gases is measured and the gas contents thus analysed. The vol. of H was found to be ; the reading recorded on the instrument, and satisfactory results were obtained. 24 ref. I. S. M.



Metals — Smelting, Refining

12485. Possibilities for Extracting Rare Metals From the Raw Materials and By-Products of Alumina Production. II. (Hungarian.) Elemer Papp. *Aluminium (Budapest)*, v. 8, March 1953, p. 81. [redacted]

Outlines various methods for the above. Discusses importance of producing Ga and radiating Th in Hungary.

PAPP, Elemer

3060. Some New Data on the Cryolite Baths in Aluminum Metallurgy. Néhány újabb adat az alumíniumkohók kriolit-fürdőiről. (Hungarian.) Elemér Papp. *Magyar Kémikusok Lapja*, v. 10, no. 11, Nov. 1955, p. 352-353.
Problems of synthetic cryolite; manufacturing suggestions. Tables. 9 ref.

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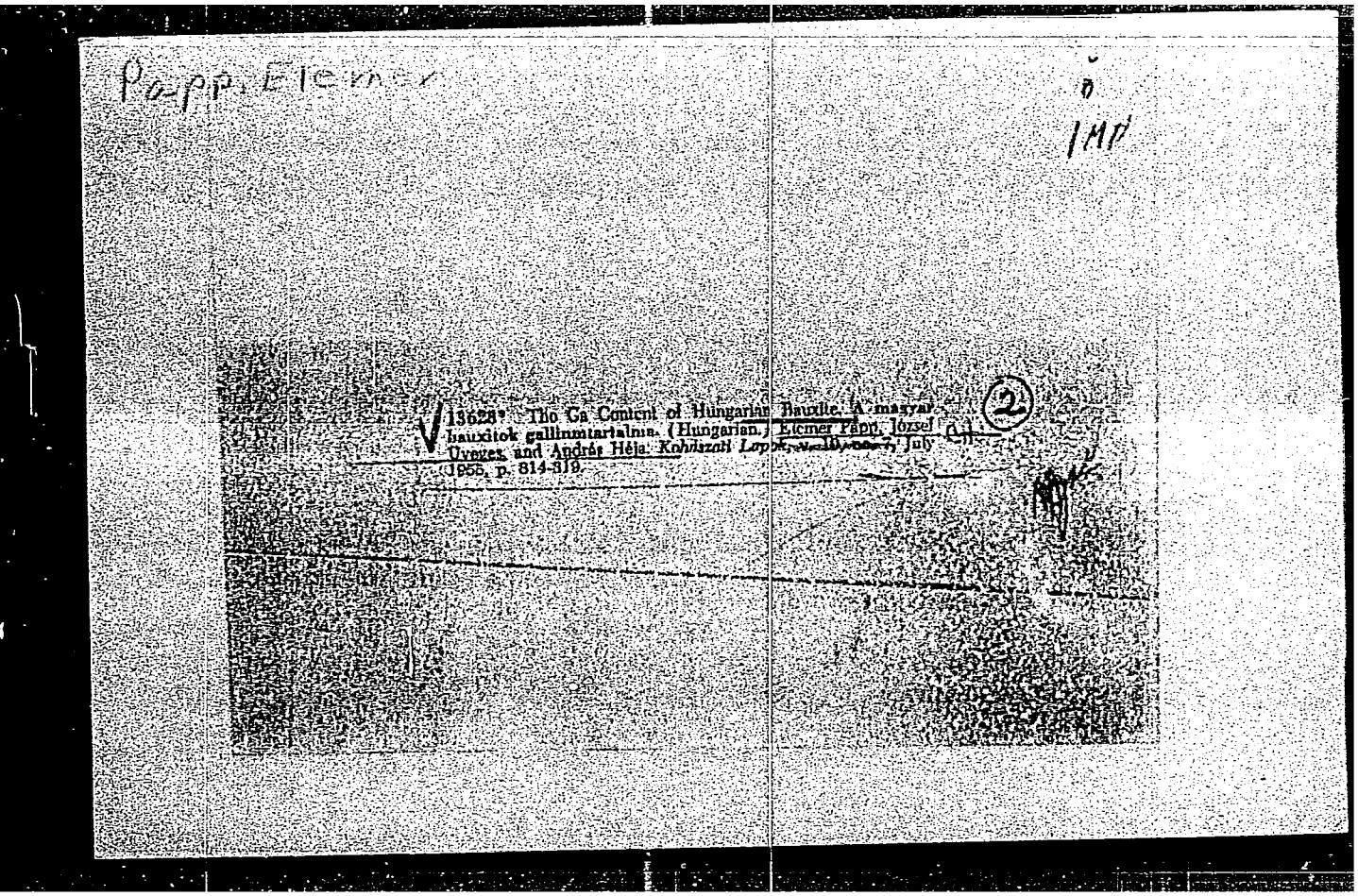


Papp, Elemer

IMP

V 13628 The Ga Content of Hungarian Bauxite. A magyar bauxitok gallium tartalma. (Hungarian.) Elemer Papp, József Üveges, and András Héja. *Kohászati Lapok*, [illegible], July 1955, p. 314-319.

(2)

ELEMER PAPP

15

The bauxite raw material as the principal basis for economical alumina production. Elemér Papp. *Fémipari Kutató Intézet Közleményei* 1956, 61–76.—For an economical Bayer alumina production the bauxite must be delivered in a mixt. of uniform quality. The chem. compn. of the mixt. must be thoroughly established. The mineralogical compn. must be established and amplified by a differential-thermo-gravimetric analysis. The roasting and processing temp. must be detd. for the respective bauxite, as well as the max. settling behavior for the red mud. F. D. G.

KIRSCHNER, Istvan; PAPP, Elemer; FRICSOVSZKY, Gyorgy

Physics of supraconductors.Pt.2. Fiz szemle 13 no.11:336-349 N '63.

1. Eotvos Lorand Tudomanyegyetem Atomfizikai Tanszeke.

PAPP, Elemer, dr. (Budapest XI Fehervari ut 144); SOLYMAR, Karoly (Budapest XI Fehervari ut 144)

Some problems of preparing and investigating high-purity metallic gallium. Acta chimica Hung 24 no.4:451-474 '60. (EEAI 10:4)

1. Research Institute for Non-Ferrous Metals, Budapest.
(Gallium) (Electrolysis) (Aluminates)

PAPP, Elemer,dr (Budapest XI, Fehervari ut. 144); KOTSIS, T.(Mrs.)(Budapest XI. Fehervari ut. 144)

Analytic control of gallium of purest quality. Acta chimica Hung 28 no.1/3:29-32 '61. (EEAI 10:9)

1. Forschungsinstitut fur Nichteisenmetalle, Budapest.

(Gallium)

S/137/62/000/011/006/045
A052/A101

AUTHOR: Papp, Elemér

TITLE: Possibilities of rare element extraction from bauxites processed by Bayer's method

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1962, 13 - 14, abstract 11G93 ("Kohász. lapok", v. 95, no. 1, 1962, 15 - 19, Hungarian)

TEXT: Red tails containing (in %) 45 Fe_2O_3, 17 Al_2O_3, 8 SiO_2, 7 TiO_2, 8 Na_2O can be subjected to roasting at 650 - 750°C and alkali extraction, extracting 70% Al_2O_3 and Na_2O. Secondary red tails are produced containing (in %) 63 Fe_2O_3, 8 Al_2O_3, 4 SiO_2, 10 TiO_2, 4 Na_2O the balance being sundry waste rock and impurities. From the secondary red tails Fe can be melted out and TiO_2 slag can be produced, however such method of Ti production is not economical. The percentage of rare elements in bauxites amounts from 0.01 to 0.001. On the basis of investigations and taking into account the existing prices of rare metals the following conclusions can be drawn: Ga is worth extracting, its content in the pulp being 160 - 210 mg/l; Zr is not worth extracting since its content is

Card 1/2

PAPP, Elemer, dr.

Extraction possibilities of rare metals from bauxite during the Bayer process. Koh lap 95 no.1:15-19 Ja '62.

(Rare earth metals) (Bauxite)

KIRSCHNER, Istvan; PAPP, Elemer; FRICSOVSZKY, Gyorgy

Physics of supraconductors. Pt.1. Fiz szemle 13 no.10:311-318 O'63

1. Eotvos Lorand Tudomanyegyetem Atomfizikai Tanszeke.

KIRSCHNER, Istvan; PAPP , Elemer; FRICSOVSZKY, Gyorgy

Physics of supraconductors, Pt.3. Fiz szemle 13 no.12: 379-384 D'63.

1. Eotvos Lorand Tudomanyegyetem Atomfizikai Tanszeke.

DETREKOI, Geza; KACSERKA, Tibor; PAPP, Elemer; RAKOLCAI, Imre; SZUCS, Lajos

More important tasks of the Szolnok County Inspectorate of the State Bureau of Geodetics and Cartography. Geod kart 15 no.1:47-55 '63.

1. Allami Foldmeresi es Terkepeszeti Hivatal Vas megyei felugyelosege.

PAPP, Elmer, dr.

Problems of manufacturing sodium hydroxide from the point of view of alumina plants. Koh lap 97 no.1:20-26 Ja'64.

PAPP, Endre, dr., a kozlekedestudomanyok kandidatusa

Relationship between carriage and shipping in case of a "uniform transportation system." Kozleked kozl 18 no.22:394-396 3 Je '62.

PAPP, Endre, dr., a kozlekedestudomanyok kandidatusa

Determination of the weight and the number of pieces of goods in their transport to and from the terminal. Kozleked kozl 18 no.34:633-635 26 Ag '62.

PAPP, Endre, dr., a kozlekedestudomanyok kandidatusa

Some problems relating to the uniform regulation of highway and railroad transportation. Kozleked kozl 19 no.3:40-42 20 Ja '63.

KOVACS, Lajos, PAPP, Endre, dr.

Characteristics of freight transportation contracts concluded by automobile transportation enterprises. Kozleked kozl 19 no.43:727-729 27 O'63.

PAPP, Endre, dr., a kozlekedestudomanyok kandidatusa

Days of Transportation Laws held at the Society of the Science of Transportation. Kozl tud sz 13 no.1:36-38 Ja '63.

1. Autokozlekedesi Tudomanyos Kutato Intezet osztalyvezetoje.

PAPP, Endre, dr., a kozlekedestudomanyok kandidatusa

Some problems of the appraisal of damages caused by transport companies. Kozleked kozl 20 no.38:627-629 20 S '64.

PAPP, Endre, dr., a kozlekedestudomanyok kandidatusa

Transportation law and the central terminal system. Kozleked kozl 20 no.52:868-869 27 D '64.

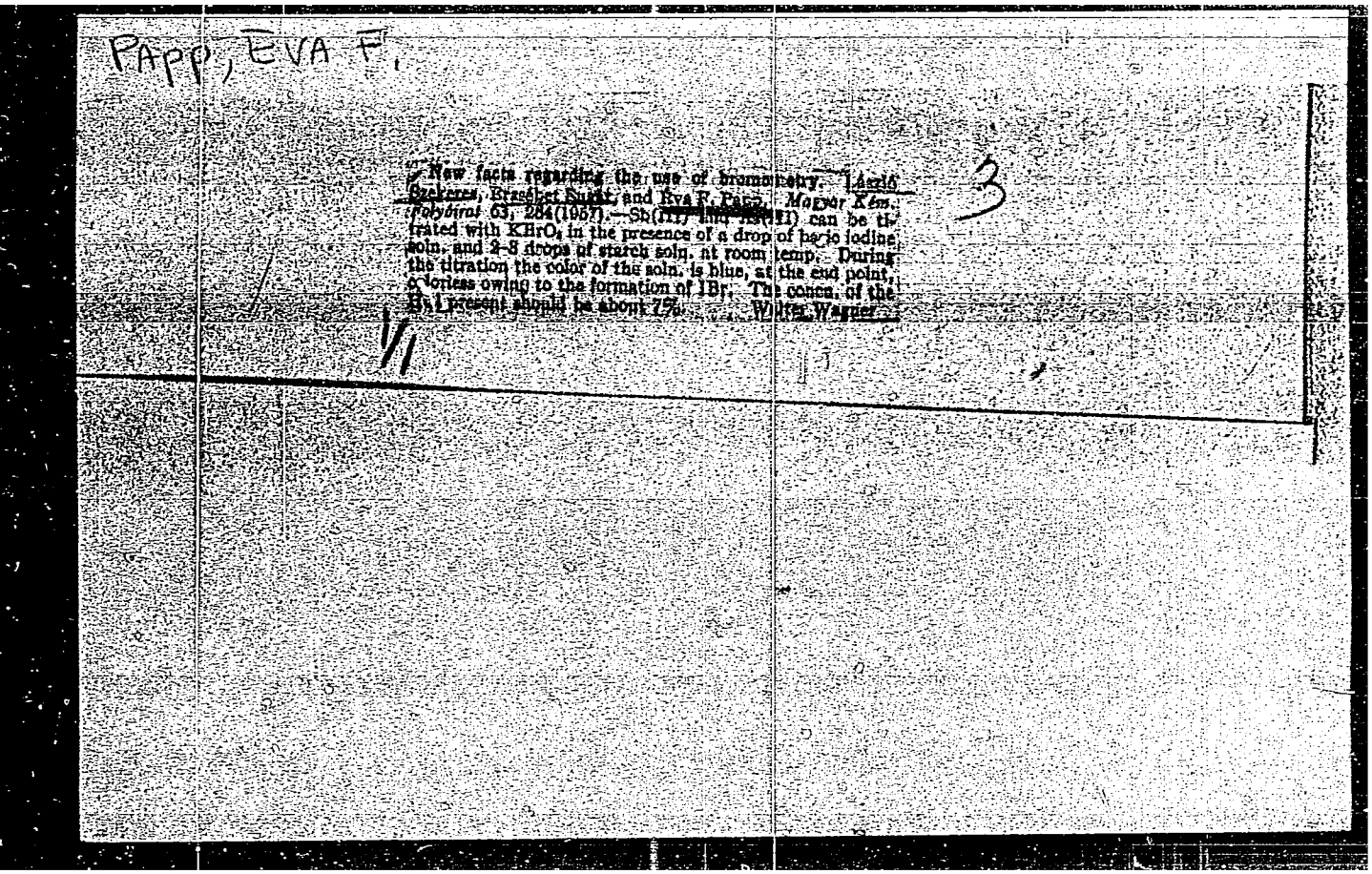
1. Division Chief, Scientific Research Institute of Automobile Transportation, Budapest.

PAPP, Endre, dr., a kozlekedestudomanyok kandidatusa

Thoughts on regulating the time of delivery. Kozleked kozl 20 no. 19:304-305 10 My '64.

PAIP, Eva; SZEKERES, Laszlo

Data on bromatometric measurements. VI. Bromatometric determination of potassium chlorate and bromate, as well as phenol and salicylic acid. Magy kem lap ly no.9:424-425 S '62.



PAPP, EVA F.

3

New facts regarding the use of bromometry. Árpád Székeres, Erzsébet Nagy, and Éva F. Papp. *Magyar Kém. Folyóirat* 63, 284(1957).—Sb(III) and As(III) can be titrated with $KBrO_3$ in the presence of a drop of hg-io iodine soln. and 2–3 drops of starch soln. at room temp. During the titration the color of the soln. is blue, at the end point, colorless owing to the formation of IBr. The concn. of the Br present should be about 7%. Walter Wagner